

WHAT IS CLAIMED IS:

1 1. An image playback device comprising:
2 a medium playback means which reads out recorded
3 information that has been recorded on a recording medium;
4 a time period discriminating means which receives the
5 recorded information read out by the image playback means
6 and discriminates periods of time during which the recorded
7 information agrees with at least one pre-set condition; and
8 a playback display means which plays back and displays
9 moving-picture image information contained in the recorded
10 information in accordance with the results of the
11 discrimination performed by the time period discriminating
12 means.

1 2. An image playback device according to Claim 1,
2 wherein the time period discriminating means includes:
3 a sound quantity detection means which receives audio
4 information from the recorded information read out by the
5 medium playback means, and detects a quantity of sound of
6 this audio information; and
7 a silence discriminating means which discriminates
8 silent periods in which the quantity of sound detected by
9 the sound quantity detection means drops below a
10 predetermined sound quantity; and
11 the playback display means plays back and displays
12 moving-picture image information contained in the recorded

information only during time periods other than the silent periods discriminated by the silence discriminating means.

3. An image playback device according to Claim 1, wherein the time period discriminating means includes:

a speaker characteristic feature extracting means which receives audio information from the recorded information read out by the medium playback means, and detects at least one characteristic feature parameter specifying long-term spectrum averages or mean pitch frequencies for the audio information; and

a speaker discriminating means which discriminates time periods during which the at least one characteristic feature parameter detected by the speaker characteristic feature extracting means agrees with at least one pre-registered characteristic feature parameter within a permissible range;

and wherein the playback display means plays back and displays moving-picture image information contained in the recorded information only during time periods discriminated by the speaker discriminating means.

4. An image playback device according to Claim 1, wherein the time period discriminating means includes:

a brightness difference detection means which receives moving-picture image information from the recorded information read out by the medium playback means, and

detects differences in brightness level between central and peripheral portions of an image screen; and

a backlighting discriminating means which discriminates periods of backlighting based on the brightness level differences detected by the brightness difference detection means;

and wherein the playback display means plays back and displays moving-picture image information contained in the recorded information only during time periods other than the periods of backlighting discriminated by the backlighting discriminating means.

5. An image playback device according to Claim 1, wherein the time period discriminating means includes:

a movement detection means which receives moving-picture image information from the recorded information read out by the medium playback means, and detects movement vectors between moving-picture frames; and

a panning discriminating means which discriminates panning periods from the movement vectors detected by the movement detection means;

and wherein the playback display means acquires the panning periods discriminated by the panning discriminating means, and plays back and displays moving-picture image information contained in the recorded information only during the panning periods or during time periods other than the panning periods.

1 6. An image playback device according to Claim 1,
2 wherein the time period discriminating means includes:
3 a contrast detection means which receives moving-
4 picture image information from the recorded information read
5 out by the medium playback means, and detects contrast of
6 this moving-picture image information; and
7 a low-contrast discriminating means which discriminates
8 low-contrast periods in which the contrast detected by the
9 contrast detection means drops below a predetermined
10 threshold value;
11 and wherein the playback display means plays back and
12 displays moving-picture image information contained in the
13 recorded information only during time periods other than the
14 low-contrast periods discriminated by the low-contrast
15 discriminating means.

1 7. An image playback device according to Claim 1,
2 wherein the time period discriminating means includes:
3 a flesh tone detection means which receives moving-
4 picture image information from the recorded information read
5 out by the medium playback means, and detects flesh tone
6 regions within an image screen; and
7 an absence-of-persons discriminating means which
8 discriminates periods of absence of persons in which the
9 flesh tone regions detected by the flesh tone detection
10 means drop below a prescribed area;

and wherein the playback display means acquires the periods of absence of persons discriminated by the absence-of-persons discriminating means, and plays back and displays moving-picture image information contained in the recorded information only during time periods of absence of persons or during time periods other than time periods of absence of persons.

8. An electronic camera comprising:

an imaging means which produces moving-picture image information by imaging an object via an imaging optical system;

an imaging parameter detection means which detects at least one imaging parameter of the imaging optical system;

a medium recording means which receives moving-picture image information produced by the imaging means and at least one imaging parameter detected by the imaging parameter detection means, and records such moving-picture image information and imaging parameter on a recording medium as recorded information;

a medium playback means which reads out recorded information from the recording medium;

a time period discriminating means which receives at least one imaging parameter from the recorded information read out by the medium playback means, and discriminates time periods during which the received at least one imaging parameter agrees with at least one pre-set condition; and

0 a playback display means which plays back and displays
1 moving-picture image information contained in the recorded
2 information in accordance with results of the discrimination
3 performed by the time period discriminating means.

1 9. An electronic camera according to Claim 8, wherein:
2 the imaging parameter detection means detects focal
3 point adjustment conditions of the imaging optical system as
4 the at least one imaging parameter;

5 the time period discriminating means receives the focal
6 point adjustment conditions from the recorded information
7 read out by the medium playback means, and discriminates
8 out-of-focus periods in which the focal point adjustment
9 conditions represent an out-of-focus state; and

10 the playback display means plays back and displays
11 moving-picture image information contained in the recorded
12 information only during time periods other than the out-of-
13 focus periods detected by the time period discriminating
14 means.

1 10. An electronic camera according to Claim 8,
2 wherein:

3 the imaging parameter detection means detects a lens
4 position of the imaging optical system as the at least one
5 imaging parameter;

6 the time period discriminating means receives the lens
7 position from the recorded information read out by the

8 medium playback means, and discriminates point-blank periods
9 in which the lens position is at a point-blank end; and
0 the playback display means plays back and displays
1 moving-picture image information contained in the recorded
2 information only during time periods other than the point-
3 blank periods discriminated by the time period
4 discriminating means.

1 11. An electronic camera according to Claim 8,
2 wherein:

3 the imaging parameter detection means detects a lens
4 position of the imaging optical system as the at least one
5 imaging parameter;

6 the time period discriminating means receives the lens
7 position from the recorded information read out by the
8 medium playback means, and discriminates periods of infinite
9 distance in which the lens position is at an infinite
10 distance end; and

11 the playback display means plays back and displays
12 moving-picture image information contained in the recorded
13 information only during the periods of infinite distance
14 discriminated by the time period discriminating means or
15 during time periods other than the periods of infinite
16 distance.

1 12. An electronic camera comprising:

an imaging means which produces moving-picture image information by imaging an object via an imaging optical system;

an environmental parameter detection means which detects at least one environmental parameter indicative of a surrounding environment at the time of imaging;

a medium recording means which receives moving-picture image information produced by the imaging means and at least one environmental parameter detected by the environmental parameter detection means, and records such moving-picture image information and the at least one environmental parameter on a recording medium as recorded information;

a medium playback means which reads out the recorded information from the recording medium;

a time period discriminating means which receives the at least one environmental parameter from the recorded information read out by the medium playback means, and discriminates time periods during which the received at least one environmental parameter agrees with at least one pre-set condition; and

a playback display means which plays back and displays moving-picture image information contained in the recorded information in accordance with results of the discrimination performed by the time period discriminating means.

13. An electronic camera according to Claim 12, wherein:

the environmental parameter detection means includes:
an infrared radiation detection means which detects
infrared radiation from an imaged object field; and
a temperature detection means which detects temperature
of an object in accordance with the infrared radiation
detected by the infrared radiation detection means, and uses
this temperature of the object as an environmental
parameter;

the time period discriminating means receives the
temperature of the object from the recorded information read
out by the medium playback means, and discriminates periods
in which the temperature of the object is within a
predetermined temperature range;

and wherein the playback display means plays back and
displays moving-picture image information contained in the
above-mentioned recorded information only during the periods
discriminated by the time period discriminating means or
during time periods other than the periods discriminated by
the time period discriminating means.

14. An image playback method comprising:
reading out recorded information that has been recorded
on a recording medium;
discriminating time periods during which the read out
recorded information agrees with at least one pre-set
condition; and

playing back and displaying moving-picture image
information contained in the recorded information in
accordance with the results of the discriminating.

15. An image playback method according to Claim 14,
wherein the time period discriminating includes:

receiving audio information from the recorded
information read out and detecting a quantity of sound of
this audio information; and

discriminating silent periods in which the quantity of
detected sound drops below a predetermined sound quantity;

and wherein moving-picture image information contained
in the recorded information is played back and displayed
only during time periods other than the discriminated silent
periods.

16. An image playback method according to Claim 14,
wherein the time period discriminating includes:

receiving audio information from the recorded
information read out, and detecting at least one
characteristic feature parameter specifying long-term
spectrum averages or mean pitch frequencies for the audio
information; and

discriminating time periods during which the detected
at least one characteristic feature parameter agrees with at
least one pre-registered characteristic feature parameter
within a permissible range;

2 and wherein moving-picture image information contained
3 in the recorded information is played back and displayed
4 only during discriminated time periods.

1 17. An image playback method according to Claim 14,
2 wherein the time period discriminating includes:

3 receiving moving-picture image information from the
4 recorded information read out, and detecting differences in
5 brightness level between central and peripheral portions of
6 an image screen; and

7 discriminating periods of backlighting based on the
8 detected brightness level differences;

9 and wherein moving-picture image information contained
10 in the recorded information is played back and displayed
11 only during time periods other than the discriminated
12 periods of backlighting.

1 18. An image playback method according to Claim 14,
2 wherein the time period discriminating includes:

3 receiving moving-picture image information from the
4 recorded information read out, and detecting movement
5 vectors between moving-picture frames; and

6 discriminating panning periods from the detected
7 movement vectors;

8 and wherein moving-picture image information contained
9 in the recorded information is played back and displayed

0 only during discriminated panning periods or during time
1 periods other than discriminated panning periods.

1 19. An image playback method according to Claim 14,
2 wherein the time period discriminating includes:

3 receiving moving-picture image information from the
4 recorded information read out, and detecting contrast of
5 this moving-picture image information; and

6 discriminating low-contrast periods in which the
7 detected contrast drops below a predetermined threshold
8 value;

9 and wherein moving-picture image information contained
10 in the recorded information is played back and displayed
11 only during time periods other than the discriminated low-
12 contrast periods.

1 20. An image playback method according to Claim 14,
2 wherein the time period discriminating includes:

3 receiving moving-picture image information from the
4 recorded information read out, and detecting flesh tone
5 regions within an image screen; and

6 discriminating periods of absence of persons in which
7 the detected flesh tone regions drop below a prescribed
8 area;

9 and wherein moving-picture image information contained
10 in the recorded information is played back and displayed
11 only during discriminated periods of absence of persons or

2 during periods other than discriminated periods of absence
3 of persons.

1 21. An electronic camera operating method comprising:
2 producing moving-picture image information by imaging
3 an object via an imaging optical system;
4 detecting at least one imaging parameter of the imaging
5 optical system;
6 receiving moving-picture image information produced by
7 the imaging and at least one detected imaging parameter, and
8 recording such moving-picture image information and imaging
9 parameter on a recording medium as recorded information;
10 reading out recorded information from the recording
11 medium;
12 receiving at least one imaging parameter from the
13 recorded information read out, and discriminating time
14 periods during which the received at least one imaging
15 parameter agrees with at least one pre-set condition; and
16 playing back and displaying moving-picture image
17 information contained in the recorded information in
18 accordance with results of the time period discriminating.

1 22. An electronic camera operating method according to
2 Claim 21, wherein:
3 the imaging parameter detecting detects focal point
4 adjustment conditions of the imaging optical system as the
5 at least one imaging parameter;

5 the time period discriminating discriminates out-of-
7 focus periods in which the focal point adjustment conditions
3 represent an out-of-focus state; and

9 the playing back and displaying plays back and displays
0 moving-picture image information contained in the recorded
1 information only during time periods other than
2 discriminated out-of-focus periods.

1 23. An electronic camera operating method according to
2 Claim 21, wherein:

3 the imaging parameter detecting detects a lens position
4 of the imaging optical system as the at least one imaging
5 parameter;

6 the time period discriminating discriminates point-
7 blank periods in which the lens position is at a point-blank
8 end; and

9 the playing back and displaying plays back and displays
10 moving-picture image information contained in the recorded
11 information only during time periods other than the
12 discriminated point-blank periods.

1 24. An electronic camera operating method according to
2 Claim 21, wherein:

3 the imaging parameter detecting detects a lens position
4 of the imaging optical system as the at least one imaging
5 parameter;

5 the time period discriminating discriminates periods of
7 infinite distance in which the lens position is at an
3 infinite distance end; and

9 the playing back and displaying plays back and displays
0 moving-picture image information contained in the recorded
1 information only during discriminated periods of infinite
2 distance or during time periods other than discriminated
3 periods of infinite distance.

1 25. An electronic camera operating method comprising:
2 producing moving-picture image information by imaging
3 an object via an imaging optical system;

4 detecting at least one environmental parameter
5 indicative of a surrounding environment at the time of
6 imaging;

7 receiving produced moving-picture image information and
8 at least one detected environmental parameter, and recording
9 such moving-picture image information and at least one
10 environmental parameter on a recording medium as recorded
11 information;

12 reading out the recorded information from the recording
13 medium;

14 receiving the at least one environmental parameter from
15 the recorded information read out, and discriminating time
16 periods during which the received at least one environmental
17 parameter agrees with at least one pre-set condition; and

18 playing back and displaying moving-picture image
19 information contained in the recorded information in
20 accordance with results of the time period discriminating.

1 26. An electronic camera operating method according to
2 Claim 25, wherein:

3 the environmental parameter detecting includes:
4 detecting infrared radiation from an imaged object
5 field; and

6 detecting temperature of an object in accordance with
7 the detected infrared radiation as an environmental
8 parameter;

9 wherein the time period discriminating discriminates
10 periods in which the temperature of the object is within a
11 predetermined temperature range; and

12 the playing back and displaying plays back and displays
13 moving-picture image information contained in the recorded
14 information only during discriminated periods or during time
15 periods other than the discriminated periods.